

Table S1. Characteristics and meteorological parameters for the sampling sites

Name of plant/site	Design flow(MLD)	Dry flow (MLD)	Number of unit in operations	Total number of samples	Wind speed m/sec	Predominated wind direction	Temp (°C)	Relative Humidity (%)
WWTP1	101	28	2	6 (Gc-4, Of-2)	0.4	NW	35.4	49.93
WWTP2	450	399	2	6 (Gc-4, Of-2)	0.8	S	34.9	48.77
WWTP3	800	425	4	12 (Gc-6, Sc-3, -Of-3)	0.5	NW	32.9	60.90
WWTP4	180	120	4	10 (Gc-4, Lg-4, Of-2)	1.7	N	34.6	54.96
WWTP5	180	110	5	15 (Gc-6, Lg-7, Of-2)	2.4	SE	33.2	55.60
WWTP6	150	100	5	14 (Gc-8, Lg-6)	2.5	SW	34.2	49.80

Gc-Grit chamber, Lg-Lagoon, Of-Office area

The characteristics of each wastewater treatment plant were obtained from plant daily work dairy. The unit operations aerosolizes bioaerosols into atmosphere were chosen based on physical observation and preliminary measurements. Number of sample was varied due to number of unit operations were in operation during sampling day. Also in some plant the number of sample variation is due to inclusion of preliminary data. A hand held anemometer and wind vane (Weather Technologies, India) were used to record the wind direction and wind speed. The temperature and humidity were recorded every minute using HOB0 data logger. These parameters were monitored for every 15 minutes during the sampling period. The table shows one hour average values of various parameters.

Table S2. Summary of airborne endotoxin (EU/m³) concentration at sampling sites

Location	Number of samples	Overall Conc.	Percentage of samples exceeding exposure limit (DEC)	Conc. Near Source	Conc. Office area
WWTP1	6	340± 285*	67	509±150	2±11
WWTP2	6	61 ±85	33	91±138	3±6
WWTP3	12	97±67	67	129±79	1.8±2
WWTP4	10	210±195	70	261±237	5±1.5
WWTP5	15	104±80	47	119±91	2.5±0.1
WWTP6	14	32±25	21	32±25	-
Over all	-	122±45	49	147±53	2.6±0.8

*Uncertainty is expressed as 95% confidence interval about the mean value

Overall concentration of airborne endotoxin at each plant was calculated by averaging the individual concentration of each sample. Percentage of samples exceeding exposure limit was calculated by comparing the current study values(1 hour averaged) with Netherlands Dutch Expert Committee (DEC) recommended a health based exposure limit of 50 EUm⁻³(≈ 4.5 ng m⁻³) Theses standards are calculated based 8 hours of exposure in working environment.

Table S3. Normalized rotated factor scores of bacterial species data over the office area of wastewater treatment plants

Sample No.	Factors			
	I	II	III	IV
1	-8.93	2.37	-6.58	82.13
2	-7.71	2.84	-10.14	79.30
3	-2.72	1.59	-9.78	85.91
4	6.02	-68.46	8.51	17.01
5	15.52	4.66	56.87	22.96
6	7.89	3.67	84.93	3.51
7	-3.68	2.38	88.92	-5.02
8	-13.57	2.40	4.68	79.35
9	-14.81	1.24	1.36	82.60
10	68.97	3.22	-20.87	-6.94
11	13.96	4.10	-4.19	77.75

R-mode principal component analysis was used for the analyzing the relationship among bacterial species in the samples. Components and their contributions in the samples (factor scores) were calculated. The factors were rotated (Varimax rotation) to simplify the relationship between the variables and classified factors. First three factors explain 78% of the data variability. The factor score corresponding to the office area samples are given in the table. Table indicates that office area samples are strongly associated with fourth factor.